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**OCT 17 2005**

From: Carlton H. Hoel  
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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Akira Osamoto et al.  
Serial No: 09/745,132  
Filed: 12/20/2000  
Art Unit: 2612  
Examiner: J. Wilson  
Docket No.: TI-29873  
Conf. No.: 6611  
Customer No.: 23494

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*Gracia Sansom*  
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**FACSIMILE COVER SHEET**

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<table border="1"> <tr> <td colspan="2">NAME OF INVENTOR(S): <b>Akira Osamoto et al.</b></td> <td colspan="2">RECEIPT DATE &amp; SERIAL NO.: <b>Serial No.: 09/745,132</b></td> </tr> <tr> <td colspan="2">TITLE OF INVENTION: <b>Digital Still Camera System and Method</b></td> <td colspan="2"><b>Filing Date: 12/20/2000</b></td> </tr> <tr> <td colspan="2">TI FILE NO.: <b>TI-29873</b></td> <td colspan="2">DEPOSIT ACCT. NO.: <b>20-0668</b></td> </tr> <tr> <td colspan="2">FAXED: <b>10/17/2005</b></td> <td colspan="2"><b>Conf. No.: 6611</b></td> </tr> <tr> <td colspan="2">DUE: <b>10/17/2005</b></td> <td colspan="2"></td> </tr> <tr> <td colspan="2">ATTY/SEC'Y: <b>CHH/ga</b></td> <td colspan="2"></td> </tr> </table>		NAME OF INVENTOR(S): <b>Akira Osamoto et al.</b>		RECEIPT DATE & SERIAL NO.: <b>Serial No.: 09/745,132</b>		TITLE OF INVENTION: <b>Digital Still Camera System and Method</b>		<b>Filing Date: 12/20/2000</b>		TI FILE NO.: <b>TI-29873</b>		DEPOSIT ACCT. NO.: <b>20-0668</b>		FAXED: <b>10/17/2005</b>		<b>Conf. No.: 6611</b>		DUE: <b>10/17/2005</b>				ATTY/SEC'Y: <b>CHH/ga</b>			
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OCT 17 2005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appl.No.: 09/745,132  
Appellant: Osamoto et al  
Filed: December 20, 2000  
TC/AU: 2612  
Examiner: Wilson

Confirmation No.: 6611

Docket: TI-29873  
Cust.No.: 23494

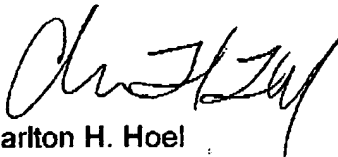
## APPELLANTS' BRIEF

Commissioner for Patents  
P.O.Box 1450  
Alexandria VA 22313-1450

Sir:

The attached sheets contain the Rule 41.37 items of appellants' brief. The Commissioner is hereby authorized to charge the fee for filing a brief in support of the appeal plus any other necessary fees to the deposit account of Texas Instruments Incorporated, account No. 20-0668. A fee transmittal sheet is enclosed.

Respectfully submitted,



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**Rule 41.37(c)(1)(i) Real party of interest**

Texas Instruments Incorporated owns the application.

**Rule 41.37(c)(1)(ii) Related appeals and interferences**

There are no related dispositive appeals or interferences.

**Rule 41.37(c)(1)(iii) Status of claims**

Claims 1-3 are pending in the application with claims 1-2 allowed and claim 3 finally rejected. This appeal involves the finally rejected claim.

**Rule 41.37(c)(1)(iv) Status of amendments**

There is no amendment after final rejection.

**Rule 41.37(c)(1)(v) Summary of claimed subject matter**

The invention provides an interpolator for color filter arrays as could be used in digital cameras, camcorders, etc. with the color filter arrays of complementary colors (i.e., yellow, magenta, cyan are the complements of red, green, blue). The interpolator acts directly on the subarrays of complementary colors and has an imbalance factor filter after the interpolation. Application Figs. 10e and 10f show RGB and complementary color interpolation computations, respectively; each 3x1 block in Fig. 10e represents one RGB pixel with the original color in capital letters and the so-far interpolated colors in lower case, and each 2x2 block in Fig. 10f represents one pixel with the original color in capital letters and the so-far interpolated colors in lower case. The lower center/left of Figs. 10e-10f show the adjustment filtering. Further, Figs. 10i-10j show the interpolator for both RGB and complementary colors with output selection according to whether the input data is RGB or complementary colors; and application pages 49-50 describe this.

**Rule 41.37(c)(1)(vi) Grounds of rejection to be reviewed on appeal**

The grounds of rejection to be reviewed on appeal are:

- (1) Claim 3 was rejected as anticipated by the Takizawa reference.

**Rule 41.37(c)(1)(vii) Arguments**

(1) Claim 3 was rejected as anticipated by Takizawa; the Examiner cited column 8, lines 44 et seq. which discuss complementary color arrays of Figs. 4-6.

Appellants reply that Takizawa does not directly interpolate each subarray of complementary color, but rather first converts the complementary colors into RGB and then interpolates. Indeed, Takizawa column 8, lines 54-56 is explicit: the complementary color arrays as in Figs.4-6 are interpolated as shown in Fig. 7 which has the steps of Averaging, Conversion (complementary colors to RGB), and then Interpolation. Further, column 9, lines 1-34 is the Fig.4 example, and lines 33-34 note the g, b, and r as the interpolations. Thus Takizawa does not suggest an interpolator for the subarrays of complementary color pixels as required by claim 3.

**Rule 41.37(c)(1)(viii) Claims appendix**

3. An interpolator for complementary-color-filtered array image, comprising:
- (a) an interpolator for the color subarrays of a complementary-color-filtered array;
  - (b) a filter coupled to the output of the interpolator to adjust the interpolated colors at each pixel by adjusting with an imbalance factor for the pixel.

**Rule 41.37(c)(1)(ix) Evidence appendix**

n/a

**Rule 41.37(c)(1)(x) Related proceedings appendix**

n/a